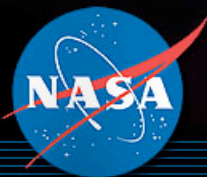


NGT

NEXT GENERATION LAUNCH TECHNOLOGY

National Aerospace Initiative



Steve Cook
Deputy Program Manager

SAFE
RELIABLE
AFFORDABLE

NGLT Objectives Derived From NASA Goals and Objectives

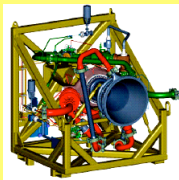
Develop and demonstrate high leverage and cross-cutting technologies to enable safe, reliable and affordable space launch system capabilities

- New Launch Systems (Near and Long Term)
- Exploration Launch
- Shuttle Life Extension Upgrades
- Expendable Launch Upgrades

Advanced the readiness of high impact technologies to support future NASA and DoD space launch decisions

- NASA launch requirements (new and upgraded systems)
- DoD's Operationally Responsive Spacelift

NASA's Investment with the Department of Defense in the National Aerospace Initiative



- Space Access Pillar
- Hypersonics Pillar (Reusable Access to Space)



NASA / DoD Cooperation through the National Aerospace Initiative

Common Technologies

Long life rocket engines
Combined cycle propulsion
Ram / scramjets
Long life, lightweight airframe and tanks
Durable thermal protection systems
“All electric” subsystems
Rapid turnaround ground and flight operations

NASA Objectives

Scientific exploration
Routine access to International Space Station
Fostering new civil and commercial markets

DoD Objectives

Homeland defense
Operationally responsive space lift
Rapid global response

“The Department of Defense, the National Aeronautics and Space Administration and industry must partner in....the areas of propulsion and power.”

Commission on the Future of the U.S. Aerospace Industry





NGLT Strategy for Achieving Objectives

Invest in technologies that have high leverage and cross cut multiple systems or that are enablers for revolutionary capabilities

- Based on system-level analysis

Continue to define/refine launch customer needs

- NASA Space Architect
- AF Space Command AOA

Provide cost/benefit analyses to support potential off-ramp decisions and to set technology priorities

Implement technology plans that incrementally advance technology towards customer goals through measurable technical metrics

Implement in-house and out-of-house competitive sourcing

- Ensure that key national capabilities remain intact



Integrated, National Roadmap for Space Access

